



WF-2060

Wi-Fi I/O Module with Isolated 6-ch DI and 6-ch Relay (Asia Only)

■ Features		
■ Support Relay type digital outputs		
■ Support sink/source type digital inputs		
Compatible with IEEE 802.11b/g standards		
■ Support infrastructure and ad hoc modes for wireless networks		
■ Support WEP, WPA and WPA2 wireless encryption		
■ Support Modbus/TCP and UDP protocols		
Support pair connection mode		
Support DO power on value & safe value Mechanism		
■ Built-in Watchdog		
ROHS A		

■ Introduction

The WF-2060, one member of ICP DAS WF-2000 (Wi-Fi) wireless product family, is a 6-channel isolated digital input with 32-bit counters, 6-channel power relay output module. WF-2060 in WLAN connection complies with the IEEE802.11b/g standards. With the popularity of 802.11 network infrastructure, the WF-2060 makes an easy way to incorporate wireless connectivity into monitoring and control systems. The WF-2060 also supports Modbus/TCP and UDP protocols and the network encryption configuration, which makes perfect integration to SCADA software and offer easy and safe access for users from anytime and anywhere.

■ System Specifications

Isolation		
Intra-module Isolation	DI: 3750 VDC	
Wi-Fi		
Transmission Range	50 meters (LOS)	
Standards	IEEE 802.11 b/g (non-RevB version) IEEE 802.11 b/g/n (RevB version)	
Receive Sensitivity	-83 dBm @ 11 Mbps (non-RevB version) -93 dBm @ 11 Mbps (RevB version)	
Output Power	8 dBm @ 11 Mbps (non-RevB version) 14 dBm @ 11 Mbps (RevB version)	
Mode	Infrastructure & Ad-hoc (non-RevB version) Infrastructure & Limit-AP (RevB version)	
Encryption	WEP, WPA and WPA2	
Antenna	5 dBi (Omni-Directional)	
Power		
Input Range	+10 VDC ~ +30 VDC	
Consumption	1.6 W	
Mechanical		
Dimensions (W x L x H)	33 mm x 127 mm x 107 mm (Without antenna)	
Installation	DIN-Rail Mounting	
Environmental		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-30 ∼ +80 °C	
Humidity	10 ~ 90% RH, Non-condensing	

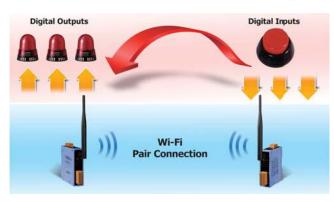
■ I/O Specifications

Digital Input/Counter			
Channels		6 Counters: 6	
Туре		Dry Contact Wet Contact	
Sink/Source (NPN/PNP)		Dry Contact: Source Wet Contact: Sink/Source	
Wet Contact	ON Voltage Level	+10 ~ +50 V	
Wet Contact	OFF Voltage Level	+4 VDC Max.	
Dry Contact	ON Voltage Level	Close to GND	
Dry Contact	OFF Voltage Level	Open	
Max. Counts		32-bit (4294967295)	
Frequency		10K Hz Max.	
Relay Output			
Channels		6	
Туре		Power Relay (SPST-NO)	
Contact Rating		Form A: 5 A 250 VAC (47 ~ 63 Hz) 5 A 30 VDC	
Operate Time		Form A: 10 ms	
Release Time		Form A: 5 ms	
Electrical Endurance		100,000 times min.	
Mechanical Endurance		20,000,000 times min.	

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Applications



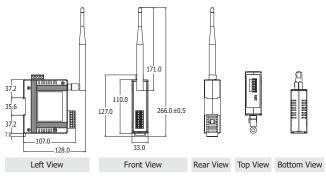


■ Wire Connections

Input Type	ON State LED ON Readback as 0	OFF State LED OFF Readback as 1
Relay Contact (Dry)	Relay Close DIX DI.GND	Relay Open DIX DI.GND
Open Collector (Dry)	ON + DIX DI.GND	OFF-K, × □⊜ □ DIx DI.GND
Relay Contact (Wet)	+ DI.COM DIX	+ DI.COM DIX
NPN Output (Wet)	$\begin{array}{c c} \hline \text{ON} & \begin{array}{c} & \\ & \\ \end{array} \\ \hline \end{array} \begin{array}{c} \\ \\ \end{array} \begin{array}{c}$	

Output	ON State	OFF State
Type	Readback as 1	Readback as 0
Relay	AC/DC	AC/DC X D RLx NO

■ Dimensions (Units: mm)



■ Pin Assignments

Pin Assignment		Terminal No.	Pin Assignment
RL0.NO	20	19	DI.GND
RL0.COM	18	17	7 DIO
RL1.NO	16	15	DI1
RL1.COM	14	13	B DI2
RL2.NO	12	11	DI3
RL2.COM	10	09	DI4
RL3.NO	80	07	DI5
RL3.COM	06	0.5	DI.COM
RL4.NO	04	03	RL5.NO
RL4.COM	02	0:	RL5.COM

■ Ordering Information

WF-2060 CR Wi-Fi I/O Module with Isolated 6-ch DI (Dry, Wet) and 6-ch Relay (Asia Only) (RoHS) Includes ANT-124-05 Antenna and CA-0910 Cable

Accessories

3S001-1 CR	Antenna Extension Cable, RG58A/U, RP-SMA Male to RP-SMA Female, 1 M (RoHS)
3S003-1 CR	Antenna Extension Cable, RG58A/U, RP-SMA Male to RP-SMA Female, 3 M (RoHS)
3S005-1 CR	Antenna Extension Cable, RG58A/U, RP-SMA Male to RP-SMA Female, 5 M (RoHS)
3S008-1 CR	Antenna Extension Cable, RG58A/U, RP-SMA Male to RP-SMA Female, 8 M (RoHS)
ANT-8 CR	8 dBi, 2.4 GHz omni-directional antenna (RP SMA Male Plug) (RoHS)
ANT-15 CR	15 dBi, 2.4 GHz omni-directional antenna (RP SMA Male Plug) (RoHS)
ANT-15YG-1 CR	15 dBi, 2.4 GHz directional yagi antenna (RP SMA Male Plug) (RoHS) Includes 3S004 Cable (HDF 200 cable, N type male to RP-SMA male, 1 M)
ANT-18 CR	18 dBi, 2.4 GHz directional panel antenna (RP SMA Male Plug) (RoHS)
ANT-21 CR	21 dBi, 2.4 GHz directional grid antenna (RP SMA Male Plug) (RoHS)
ANT-124-03 CR	3 dBi, 2.4 GHz omni-directional antenna (RP SMA Male Plug) (RoHS)

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